



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,707	10/18/2003	Jeremy Moore	81044475	2197
22844	7590	06/03/2005	EXAMINER	
FORD GLOBAL TECHNOLOGIES, LLC. SUITE 600 - PARKLANE TOWERS EAST ONE PARKLANE BLVD. DEARBORN, MI 48126			TRAN, DIEM T	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688.707

Applicant(s)

MOORE ET AL.

Examiner

Diem Tran

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6, 8-10, 12-14, 16, 17 and 19-31 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 3 is/are allowed.
- 6) ☒ Claim(s) 5, 6, 9, 10, 13, 14, 17, 19, 22, 24-26 and 29 is/are rejected.
- 7) ☒ Claim(s) 4, 8, 12, 16, 20, 21, 23, 27, 28, 30 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3748

DETAILED ACTION

-This office action is in response to the amendment filed on 3/8/05. In this amendment, claims 6, 10, 14, 16, 17, 19, 20-24, 27, 28, 30 have been amended and claims 1, 7, 11, 15, 18 have been canceled. Overall, claims 2-6, 8-10, 12-14, 16, 17, 19-31 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 24 of the amendment filed on 3/8/05, the applicants added the claimed limitation “ continuing to operate both the engine and the starter motor after fuel is provided to the engine **until the exhaust gas treatment device reaches a predetermined temperature**” is considered new matter since the originally filed disclosure does not contain any support for the invention as now claimed.

The amendment filed 3/8/05 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is

Art Unit: 3748

not supported by the original disclosure. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 24-26, 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaiser et al. (US Patent 5,979,158).

Regarding claims 24-25, 29, Morganti discloses a method for reducing exhaust emissions during cold start of an internal combustion engine, the engine being coupled to a starter motor and an exhaust gas treatment device (10) (see Figure 1), comprising:

supplying rotational energy to the engine at rest by the starter motor (see col. 3, lines 61-67); providing fuel to the engine when an engine rotational speed substantially exceeds an idle speed; and continuing to operate both the engine and the starter motor after fuel is provided to the engine (see col. 5, lines 29-34).

Regarding claim 26, in Kaiser, said operating both the engine and the starter motor has both the engine and the starter motor providing mechanical power (the operation of the starter motor and engine in Kaiser turns a crankshaft in the engine and thus providing mechanical powers to the engine).

Claims 5-6, 13, 14, 17, 19, 22 are rejected under 35 U.S.C. 102(b) as being unpatentable over Morganti et al. (US Patent 6,381,955).

Regarding claims 6, 14, Morganti discloses a method for reducing exhaust emissions during cold start of an internal combustion engine, the engine being coupled to a starter motor and an exhaust gas treatment device (18), comprising providing assist to the engine by the starter motor to meet a demanded power until a temperature of the exhaust gas treatment system reaches an operating temperature of the exhaust gas treatment device (see col. 3, lines 33-36, col. 4, lines 1-9).

Regarding claims 5, 13, Morganti further discloses heating the exhaust gas treatment device by electric heater (22) coupled to the exhaust gas treatment device (see Figure 1).

Regarding claim 17, Morganti further discloses heating the exhaust gas treatment device by electric heater (22) coupled to the exhaust gas treatment device (18).

Regarding claims 19, 22, Morganti further discloses that said starter motor is an integrated starter generator (see col. 3, lines 66-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3748

Claims 9, 10, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morganti et al. (US Patent 6,381,955) in view of Nohira et al. (US Patent 3,895,541).

Regarding claims 10, 18, Morganti discloses all the claimed limitations as discussed in claims 6, 14 above, however, fails to disclose delaying a shifting operation of an automatic transmission coupled to the internal combustion engine. Nohira teaches delaying a shifting operation of an automatic transmission coupled to the internal combustion engine during cold start (see col. 6, lines 30-40) to increase the exhaust gas temperature to a light off temperature at which the catalyst provides a sufficient activity for reducing pollutants of the exhaust gas.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teaching of Nohira in the Morganti device since the use thereof would have reduced harmful emissions during cold start.

Regarding claim 9, Morganti further discloses heating the exhaust gas treatment device by electric heater (22) coupled to the exhaust gas treatment device (18).

Allowable Subject Matter

Claims 2, 3 are allowed.

Claims 4, 8, 12, 16, 20, 21, 23, 27, 28, 30, 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3748

Response to Arguments

Applicant's arguments filed on 3/8/05 have been fully considered but they are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (571) 272-4866. The examiner can normally be reached on Monday -Friday from 8:30 a.m.- 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (703) 872-9306.

Art Unit: 3748

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 800-786-9199 (toll-free).

DT
May 31, 2005



Diem Tran
Patent Examiner
Art unit 3748



THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700